

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

- 1 1. (Original) A suspension assembly including a load beam and a flexure
2 supporting a slider, said flexure comprising:
3 a first supporting area connected to said load beam on a leading end side;
4 a second supporting area connected to said load beam on a supporting end side;
5 a flexure tongue provided with a supporting area of said slider, a dimple contact
6 point, and a leading edge;
7 a metal layer including:
8 a first loop spring structure extending from said first supporting area so as
9 to support said flexure tongue and having a parameter for giving stiffness to said flexure
10 tongue; and
11 a second loop spring structure extending from said second supporting area
12 so as to support said flexure tongue and having a parameter for giving stiffness to said
13 flexure tongue, a value of said parameter being selected in such a manner that said second
14 loop spring structure gives a stiffness smaller than the stiffness said first loop spring
15 structure gives to said flexure tongue; and
16 a wiring layer laminated on said metal layer in said second supporting area
17 and extendedly branching from said second supporting area toward said slider.
- 1 2. (Original) The suspension assembly according to claim 1, wherein said
2 first loop spring structure and said second loop spring structure constitute a pair of strip-shaped
3 arms each formed of the metal layer.
- 1 3. (Original) The suspension assembly according to claim 2, wherein each of
2 said parameters of said first and second loop spring structures is selected as one or a combination

3 of two or more from the group consisting of a material, a path length, a thickness, a width, and a
4 path shape of the strip-shaped arms formed of said metal layer.

1 4. (Original) The suspension assembly according to claim 2, wherein said
2 metal layer is a stainless steel having a thickness ranging from about 0.015 mm to 0.025 mm.

1 5. (Original) The suspension assembly according to claim 4, wherein the
2 path length of said second loop spring structure is about 1.2 times or more as long as the path
3 length of said first loop spring structure.

1 6. (Original) The suspension assembly according to claim 4, wherein either
2 the width of said first loop spring structure or the width of said second loop spring structure is
3 about 0.150 mm or less.

1 7. (Original) The suspension assembly according to claim 4, wherein said
2 first supporting area is connected to said load beam at a first fixing point passing through a
3 center line of said load beam, said second supporting area is connected to said load beam at a
4 second fixing point passing through a center line of said load beam, the pair of strip-shaped arms
5 constituting said first loop spring structure extends from an area near said first fixing point in
6 said first supporting area, and the pair of strip-shaped arms constituting said second loop spring
7 structure extends from an area near said second fixing point in said second supporting area.

1 8. (Original) The suspension assembly according to claim 7, wherein a
2 distance from said dimple contact point to said second fixing point is about 1.5 times or more as
3 long as a distance from said first fixing point to said dimple contact point.

1 9. (Original) The suspension assembly according to claim 7, wherein the
2 distance from said first fixing point to said dimple contact point is about 1.25 mm or less.

1 10. (Original) The suspension assembly according to claim 1, wherein said
2 first loop spring structure and said second loop spring structure support said flexure tongue at a
3 point on a side of the leading edge in relation to a center of the supporting area of said slider.

1 11. (Original) The suspension assembly according to claim 1, wherein said
2 first loop spring structure and said second loop spring structure are provided with a common
3 portion and said common portion, instead of said first loop spring structure and said second loop
4 spring structure, supports said flexure tongue.

1 12. (Original) The suspension assembly according to claim 1, wherein said
2 wiring layer includes a copper layer and a dielectric layer.

1 13. (Original) The suspension assembly according to claim 12, wherein a
2 thickness of said metal layer ranges from about 0.015 mm to 0.025 mm, a thickness of said
3 dielectric layer ranges from about 0.005 mm to 0.020 mm, and a thickness of said copper layer
4 ranges from about 0.005 mm to 0.020 mm.

1 14. (Original) The suspension assembly according to claim 1, wherein said
2 dimple contact point is given as a contact portion between a dimple formed on said load beam
3 and said flexure tongue.

1 15. (Original) The suspension assembly according to claim 1, wherein said
2 dimple contact point is given as a contact portion between a dimple formed on said flexure and
3 said load beam.

1 16. (Original) The suspension assembly according to claim 1 further
2 comprising a limiter, formed of part of said metal layer, extending from said flexure tongue.

1 17. (Original) A suspension assembly including a load beam and a flexure
2 connected to said load beam and supporting a slider, said flexure comprising:
3 a flexure tongue provided with a supporting area of said slider;
4 a first spring structure supporting a first supporting area connected to said load
5 beam on a leading end side and said flexure tongue in such a manner as to extend from said first
6 supporting area for giving a dominant stiffness to said flexure tongue;

7 a second spring structure supporting a second supporting area connected to said
8 load beam on a supporting end side and said flexure tongue in such a manner as to extend from
9 said second supporting area for giving an auxiliary stiffness to said flexure tongue; and
10 a wiring layer laminated on said metal layer in said second supporting area and
11 extendedly branching from said second supporting area toward said slider.

1 18. (Original) The suspension assembly according to claim 17, wherein a
2 stiffness given by said second spring structure to said flexure tongue is about 40% or less of a
3 stiffness given by said first spring structure and said second spring structure to said flexure
4 tongue.

1 19. (Original) The suspension assembly according to claim 18, wherein said
2 stiffness is a pitch stiffness or a peel stiffness of said flexure tongue.

1 20. (Currently Amended) A suspension assembly including a load beam and a
2 flexure provided with a metal layer and supporting a slider, said flexure comprising:

3 a first and third supporting ~~area~~ areas composed of said metal layer and supported
4 by said load beam;

5 a flexure tongue including a second supporting area that supports said slider, a
6 dimple contact point, and a leading edge, and formed of part of said metal layer; and

7 at least one supporting structure extending from the first and third supporting ~~area~~
8 areas to a leading edge side of the flexure tongue, wherein the leading edge side consists of the
9 leading edge of the flexure tongue and side edges of the flexure tongue existing between a center
10 of a mounting position of said slider and the leading edge, and wherein the at least one
11 supporting structure is a sole structure for supporting said flexure tongue,

12 wherein the first supporting area is supported by the load beam prior to the
13 leading edge in a direction perpendicular to the leading edge, and wherein the third supporting
14 area is supported by the load beam after a trailing edge of the flexure tongue along the
15 perpendicular direction.

1 21. (Original) The suspension assembly according to claim 20, wherein said
2 leading edge is disposed on a leading end side of said load beam with respect to a trailing edge.

1 22. (Original) The suspension assembly according to claim 20, wherein said
2 leading edge is disposed on a supporting end side of said load beam with respect to a trailing
3 edge.

1 23. (Original) A rotary disk storage device, comprising:
2 a rotary disk;
3 a head reading and writing data from and to said rotary disk, or either reading or
4 writing data from or to said rotary disk;
5 a slider mounted with said head;
6 a suspension assembly supporting said slider; and
7 an actuator mechanism supporting said suspension assembly, said suspension
8 assembly being one as recited in claim 1.

1 24. (Original) The rotary disk storage device according to claim 23, further
2 comprising a ramp in which said slider is retracted.

1 25. (Original) The rotary disk storage device according to claim 23, wherein
2 said actuator mechanism turns about a pivot shaft above a surface of said rotary disk.

1 26. (Original) A rotary disk storage device, comprising:
2 a rotary disk;
3 a head reading and writing data from and to said rotary disk, or either reading or
4 writing data from or to said rotary disk;
5 a slider mounted with said head;
6 a suspension assembly supporting said slider; and
7 an actuator mechanism supporting said suspension assembly, said suspension
8 assembly being one as recited in claim 17.

1 27. (Original) The rotary disk storage device according to claim 26, further
2 comprising a ramp in which said slider is retracted.

1 28. (Original) The rotary disk storage device according to claim 26, wherein
2 said actuator mechanism turns about a pivot shaft above a surface of said rotary disk.

1 29. (Original) A rotary disk storage device, comprising:
2 a rotary disk;
3 a head reading and writing data from and to said rotary disk, or either reading or
4 writing data from or to said rotary disk;
5 a slider mounted with said head;
6 a suspension assembly supporting said slider; and
7 an actuator mechanism supporting said suspension assembly, said suspension
8 assembly being one as recited in claim 20.

1 30. (Original) The rotary disk storage device according to claim 29, further
2 comprising a ramp in which said slider is retracted.

1 31. (Original) The rotary disk storage device according to claim 29, wherein
2 said actuator mechanism turns about a pivot shaft above a surface of said rotary disk.